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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/299,539	04/26/99	MUNOZ-ESCALONA LAFUENTE A	B-3643-61707

IM62/0719

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EXAMINER	
PASTERCZYK, J	
ART UNIT	**PAPER NUMBER**
1755	8

DATE MAILED: 07/19/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/299,539	Lafuente et al.
Examiner	**Group Art Unit**
J. Pasterczyk	1755

☒ Responsive to communication(s) filed on *Jun 21, 2000*.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-20* is/are pending in the application.

Of the above, claim(s) *8, 9, and 20* is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-7 and 10-19* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☒ Claims *1-20* are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). *5*

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

1. This Office action is in response to the election and amendment received 6/21/00 in response to the restriction requirement mailed 5/16/00.

2. Applicant's election with traverse of claims 1-7 and 10-19 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that restriction is authorized but not required. This is not found persuasive because examination of the other claims 8, 9 and 20 would require searching in two different other classes and an unknown number of subclasses within those classes.

The requirement is still deemed proper and is therefore made FINAL. Claims 1-7 and 10-19 are under consideration; claims 8, 9 and 20 are withdrawn.

3. The examiner notes that applicants in their above amendment introduced claims 11-21. Due to a numbering error and the requirements of rule 126, these claims shall be henceforth referred to as claims 10-20 respectively. Applicants may wish to check and amend the dependency of the claims in light of this renumbering.

4. The examiner notes use of the term "system" throughout the present claims and specification. Unless the claims and specification are amended to reflect language found in 35 USC 101 to refer to the four statutory classes of subject matter patentable, the term "system" will be considered to mean "composition".

5. The abstract of the disclosure is objected to because it is slightly overlong; it is suggested that the instances of "independently selected from" be deleted. Correction is required. See MPEP § 608.01(b).

6. Claims 1-7 and 10-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, l. 2, "obtainable by" should be --obtained by--; note Ex parte Tanksley, 26 USPQ2d 1384; Atlantic Thermoplastics Co. Inc. V. Faytex Corp., 970 F.2d 834, 23 USPQ2d 1481, 1486, n. 6 (Fed. Cir. 1992), citing Cochrane v. BASF, 111 U.S. 293. It is also not clear whether in these product by process claims the support must have the presence of surface hydroxyl groups in order to react with the alumoxane which then further reacts with the siloxane groups of the metallocenes then added. In the definition of m, when m = 2-4, this appears to be inconsistent with the structures of the formulae II and III in which only one Q group is present, and it makes it unclear then what the atomic connectivity in structures with m = 2-4 is supposed to be.

Renumbered claim 12 appears to fail to further limit the claim from which it apparently should depend, the renumbered claim 11. All of claims 10-20 should be checked for their dependency, in particular renumbered claims 12, 14 and 17.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-7 and 10-19 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 0 802 203 (hereafter referred to as Hidalgo Llinas).

The examiner first notes that the present claims are couched in product by process language, with the process being the addition of an alumoxane to a porous inorganic support, followed by addition of a metallocene of formulae I, II or III to that resulting product. It thus appears as if covalent bonds are formed between the alumoxane and the support, as well as between the metallocene and the support and possibly between the bound alumoxane and the metallocene.

Hidalgo Llinas discloses at p. 4, top, a linking group used to treat a support of the present invention. This reference further discloses on p. 9, l. 7-13 the addition of alumoxanes to the thus treated support. The examples disclose reaction of the alumoxane treated supports with the metallocenes. The overall final product appears to read on those of the present invention.

Since the prior art appears to disclose and teach the present invention on the basis of inherent property characteristics which either anticipate or render obvious the present claims, an

alternative 102/103 rejection is deemed appropriate, and the burden of proof that it does or does not shifts to applicants as in In re Best, 195 USPQ 430, 433 (CCPA 1977).

10. Claims 1-7 and 10-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 372 414 (hereafter Antberg) in view of EP 0206 794 (hereafter referred to as Welborn).

Antberg discloses at p. 6, l. 15 a metallocene reading on those of the present claims, and on p. 8, l. 1-6 the use of an alumoxane to activate it.

Antberg lacks teaching of use of a support as well as the order of addition in the present product-by-process claims.

However, Welborn at p. 6, l. 16-19 teaches the use of a support as well as the order of addition of the present claims.

It would have been obvious to apply the teaching of Welborn to the disclosure of Antberg with a reasonable expectation of obtaining a highly-useful olefin polymerization catalyst with the expected benefit of being able to use the catalyst in a slurry or gas phase polymerization process without the need for excess alumoxane.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The other prior art cited all discloses further instances of metallocenes having silicon-containing side groups used in olefin polymerization catalysts.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is (703) 308-3497. Our fax number is 305-5433.

Mark L. Bell
Supervisory Patent Examiner
Technology Center 1700

J. Pasterczyk

July 6, 2000